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Atomic International Division

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The final closeout activity will complete the SRE D&D project. This activity will essentially consist of performing a total radiological survey of the SRE area, delineating areas where decontamination is incomplete, and resurveying after completion of decontamination. A final survey report will be prepared.

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1.0 OBJECTIVE

The final closeout activity will complete the SRE D&D. The SRE D&D will be ready for closeout upon completion of all excavations, decontamination, backfilling, and repair to the site. The final closeout activity will essentially consist of making a comprehensive radiological survey of the entire SRE site to verify that the radioactivity remaining is at least below the prescribed limits for future unrestricted facility use. In making such a survey, particularly in the SRE high bay, finding of contamination levels above the limits is anticipated. When such areas are discovered, decontamination or removal will be required.

2.0 APPLICABLE DOCUMENTS

- |     |                 |   |
|-----|-----------------|---|
| 2.1 | FDP-704-990-003 | SRE Dismantling Plan, Revision A  |
| 2.2 | SRR-704-990-001 | Operational Safety Plan, Revision B   |
| 2.3 | PP-704-990-001  | Quality Assurance Plan, Revision D  |
| 2.4 | PP-704-990-002  | D&D Program Plan, Revision A/1  |
| 2.5 | N704-CS-990-001 | D&D of Facilities Document Status Report<br>(Configuration Summary), Revision D |
| 2.6 | N704-TP-990-008 | Radiological Survey Plan, Support of<br>D&D Program Operations at T143          |
| 2.7 | HSRS Records    | Radiation Surveys During D&D Operations   |

### 3.0 WORK SCOPE

The final closeout activity will essentially consist of making a comprehensive radiological survey of the entire SRE site. The SRE site is shown in Figure 1. The survey will include all the area inside the dotted lines shown in Figure 1, but will be most intensive in the immediate vicinity of Building 143.

After removal of activated and contaminated materials, equipment, and structures from the interior of Building 143, a radiological survey of the high bay interior walls, ceiling, recesses, and remaining equipment (air conditioning, electrical distribution, cranes, lights, etc.) will be conducted to detect removable and total contamination. Wherever contamination is found at a level exceeding the acceptable limits, as shown on Table 1, decontamination or physical removal will be effected using techniques such as: vacuum-foaming, wiping with special solvents, scrubbing, or other suitable means.

The exterior surfaces of Building 143 will be similarly surveyed and decontaminated as necessary.

The area outside of the SRE building will be systematically checked using portable instrumentation. Included in this outside survey will be all areas previously checked during D&D of the outlining facilities. Selected soil samples, water samples, rock samples, and vegetation samples will be taken, analyzed, and reported. Should any radioactivity above the prescribed limits be detected, decontamination will proceed until the level is decreased below the prescribed limits. A final survey report will be prepared.

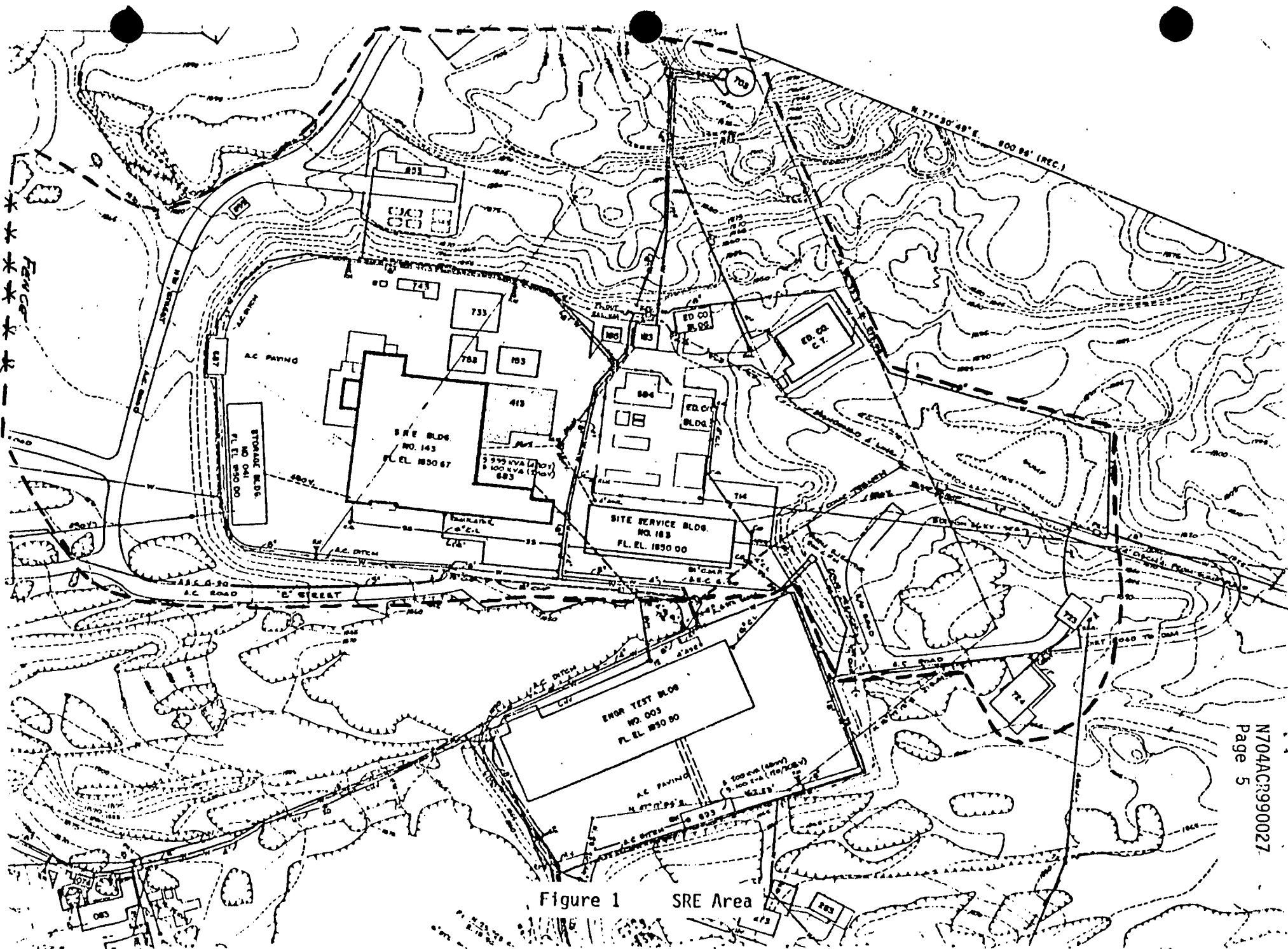


TABLE 1

Surface Contamination Limits for Decontamination  
and Disposition at the SRE

|                     |   |                             |
|---------------------|---|-----------------------------|
| Beta Gamma Emitters | 0.1 mrad/hr at 1 Cm<br>with 7 mg/Cm <sup>2</sup> absorber | 100 dpm/100 Cm <sup>2</sup> |
| Alpha Emitters      | 100 dpm/100 Cm <sup>2</sup>                               | 20 dpm/100 <sup>2</sup>     |

Acceptable decontamination levels for soil is a specific activity of 100 pCi/gm and for water MPCw.

4.0

PROCEDURES

Detailed Working Procedures (DWP's) will be prepared delineating the final radiological survey. The procedures describe where smear, soil, and water samples will be taken, the frequency of sampling, and where radiation instrument measurements will be taken.

The procedures will also define the need for scaffolding, man-lifts, or means to gain access to ceilings, walls, etc.

The DWP's will contain the following statement: "A single designated working copy of the DWP may be changed in red ink (red lined) by the authorized Development and Test representative as procedural changes dictate. A Health and Safety representative must approve and sign those changes affecting health or safety; the Program Office Project Manager must approve and sign those changes affecting the scope of task, i.e., cost or schedule; and Quality Assurance must approve and sign those changes affecting quality. At the

completion of the task covered by the DWP, the marked-up working copy will be incorporated into the DWP as an appendix, reviewed by Quality Assurance, and released through Engineering Data."

5.0 OPERATIONS

5.1 Organization

The work will be directed and performed by the Health Safety and Radiation Services, Department 778. Support will be provided by the Remote Technology Unit, Department 731-540, Facilities and Industrial Engineering, and Maintenance. The D&D Program Office will monitor progress, arrange for photography, interface with Purchasing and F&IE, and assist in resolution of problems.

5.2 Records

HSRS will keep a daily log of the operations. A work copy of the procedure is to be available at the site, and upon completion of blocks of work the procedure is to be dated and initialed. A final survey report will be prepared.

5.3 Waste Handling

Radioactive waste will be transferred to the RMDF as soon as boxes are filled. Boxes and other containers will be provided in advance of need.

6.0 SCHEDULE

The final survey will be completed and the report issued before October 1, 1978.